Look at the opposite figure, then answer the following questions :

1. This device is called ....
2. If the examined cell has a cell wall, it may be a cell of ....
   - a. leaf.
   - b. lion's body.
   - c. human body.
   - d. mouse body.
3. This device must be used to see the structure of all the following cells , except ....
   - a. plant cells.
   - b. human body cells.
   - c. unfertilized bird's egg.
   - d. bacteria cells.

Look at the opposite figure, which show the structure of different cells, then complete the sentences below :

The cell wall is found in cell number .... only.

Cell ① (Animal cell)

Cell ② (Plant cell)

2. By examining a part of your skin under microscope you can see the same structure of the cell number ....

Look at the following figure, then write the correct number beside the suitable sentence :

1. Powerhouses in the cell. (..........)
2. Control the cell division. (..........)
3. Assembling and transporting proteins. (..........)
4. Control the selective permeability feature. (..........)
5. Packing and transporting different materials. (..........)

1 2 3 4 5

Choose from column (B) what suits it in column (A) :

(A)	(B)
1. A cell	a.
2. A tissue	b.
3. An organ	c.
4. A system	d.

1. .... 2. .... 3. .... 4. ....

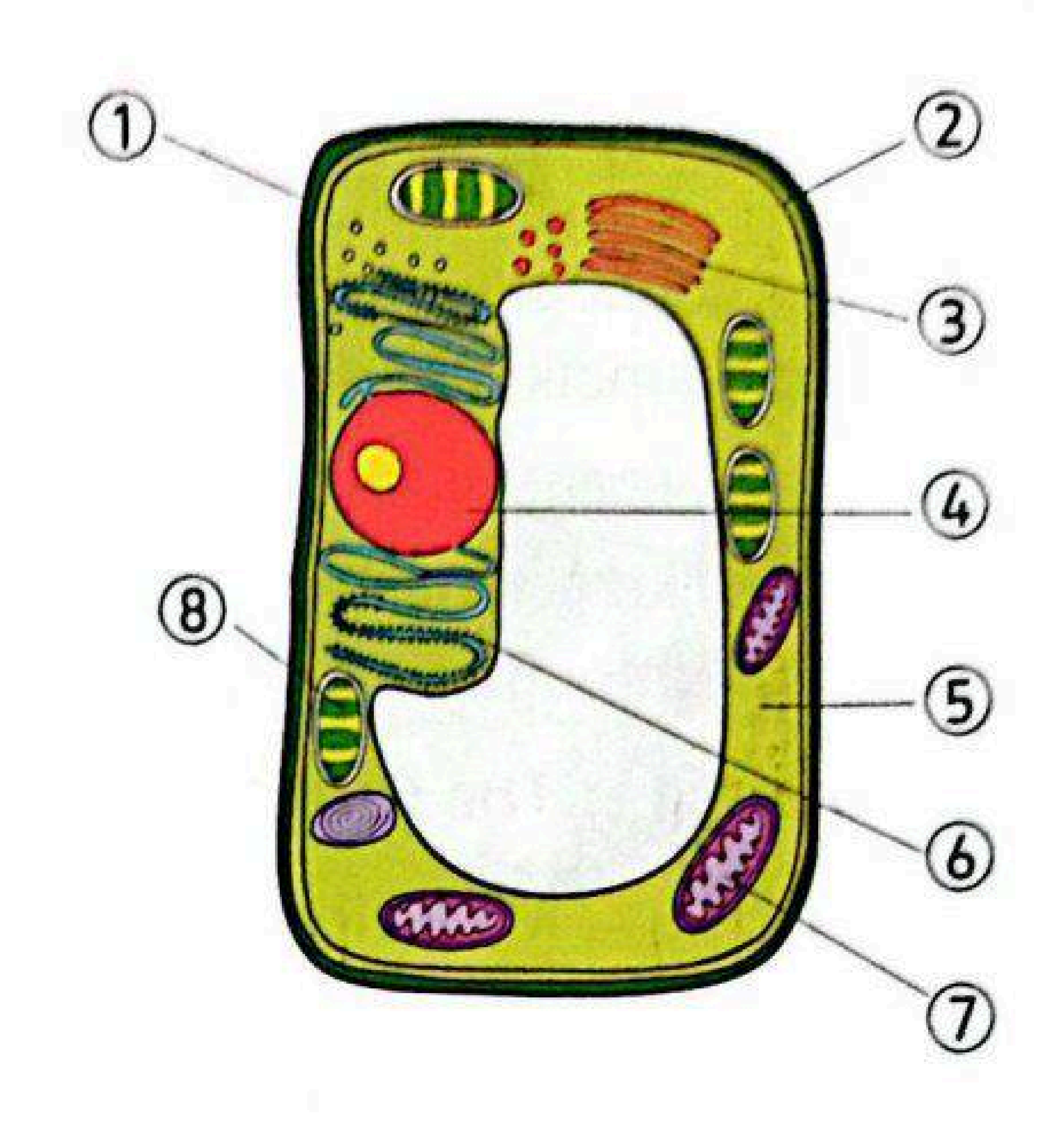
ook at the opposite figure, then complete the following sentences :

.. Structures number .... and .... are found in plant cell only.

2. Structures number .... , ... , ... , ... , ... and .... are found in both plant cell and animal cell.

3. Structure number .... acts like the city hall in cities.

4. Structure number .... is considered as the food factory of plant cell.



Use the following systems to complete the table below :

(you can use the same system more than once)

(Digestive system – Circulatory system – Nervous system)

Description	Name of system
1. It controles the muscles of stomach.	....
2. It transmits nutrients from digestive system to the nerve cells.	....
3. It provides the muscles of heart with its needed food.	....
4. It controls the muscles of heart.	....
5. They help in providing and transmitting the nutrients to the muscles of arms.	....

.ook at the following figures, then complete the following sentences :

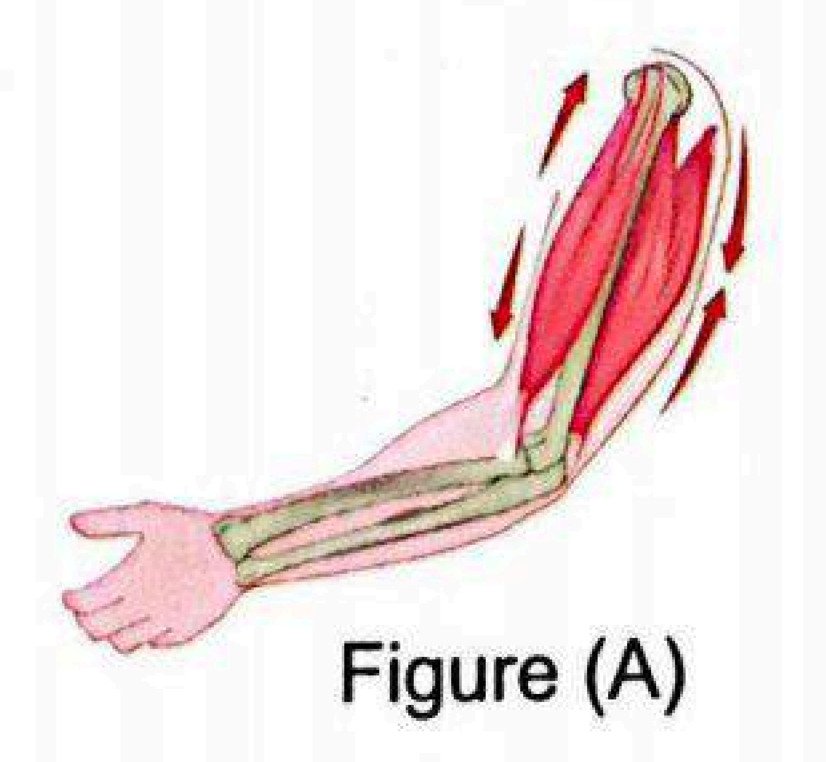


Figure (A)

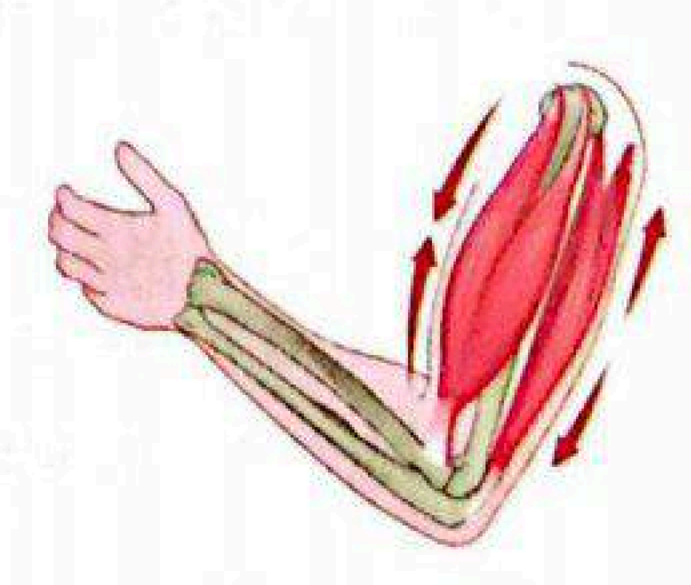
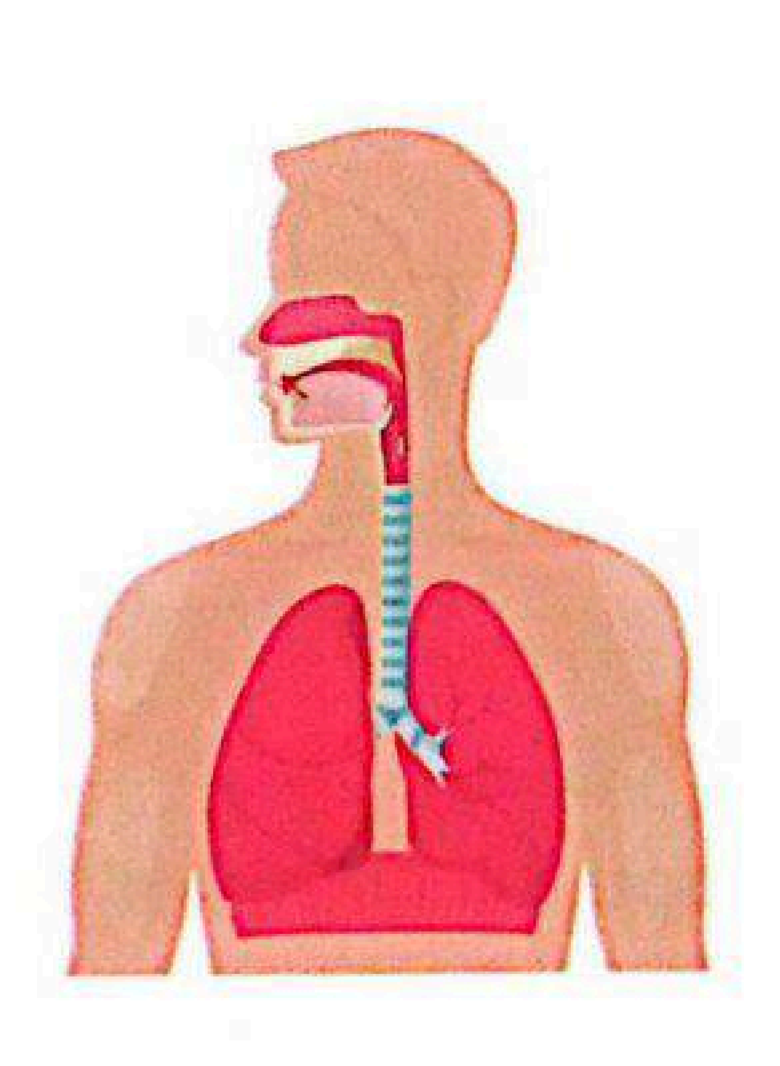
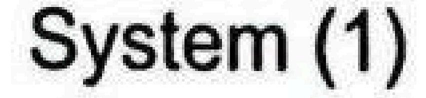


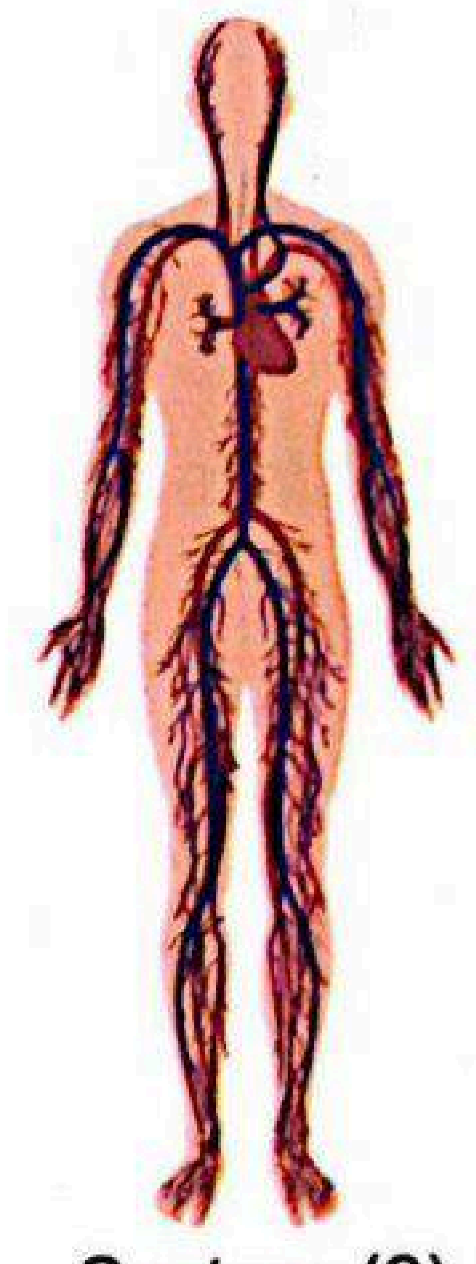
Figure (B)

1. The forearm in figure .... moves up toward your shoulder.
2. The forearm in figure .... moves down away from your shoulder.
3. The muscles in front of the upper arm contract in figure .... and relax in figure ....
4. The muscles in the back of the upper arm contract in figure .... and relax in figure ....

The following figures show some human body systems, if a person is subjected to an accident while he is riding a bicycle, complete the sentences below :



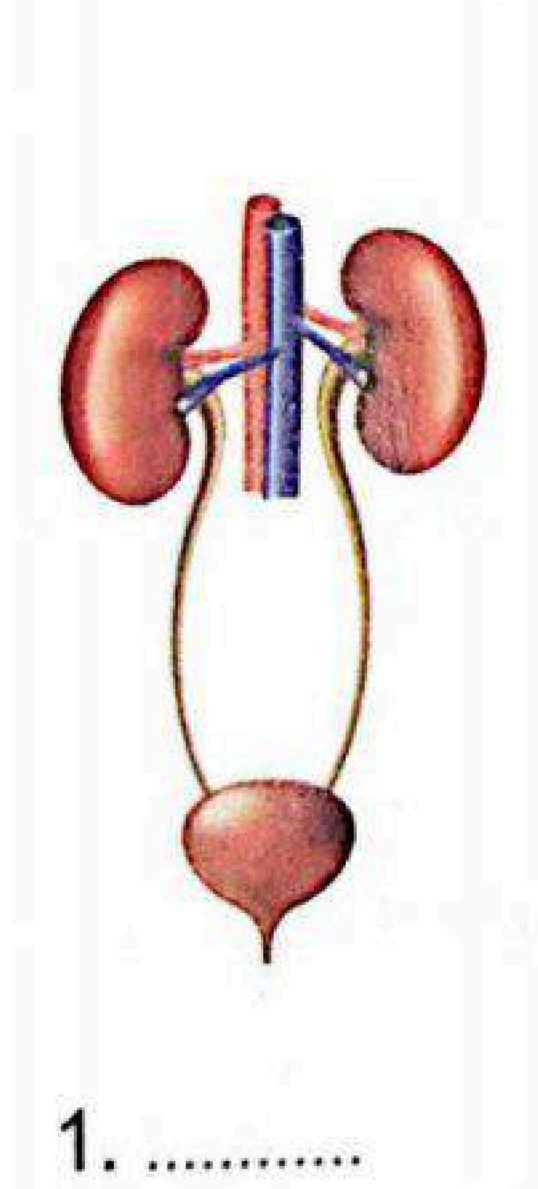

System (1)

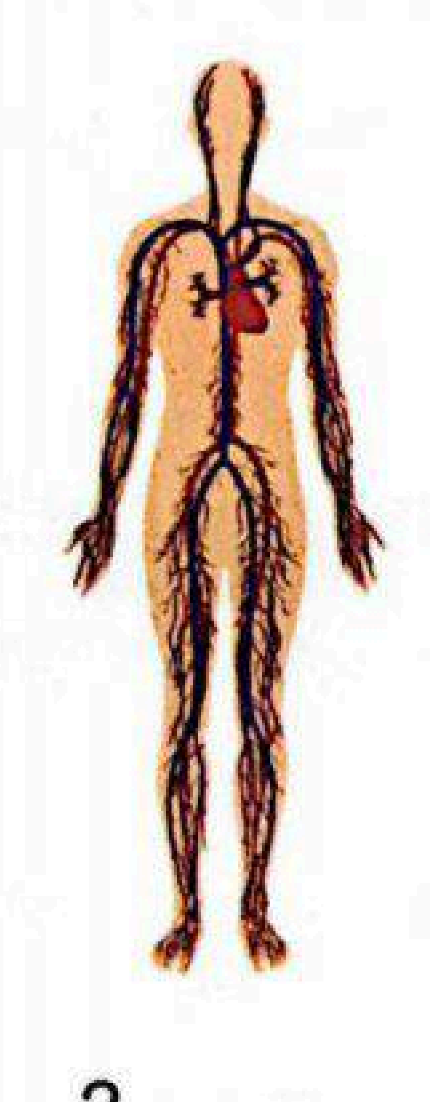

System (2)

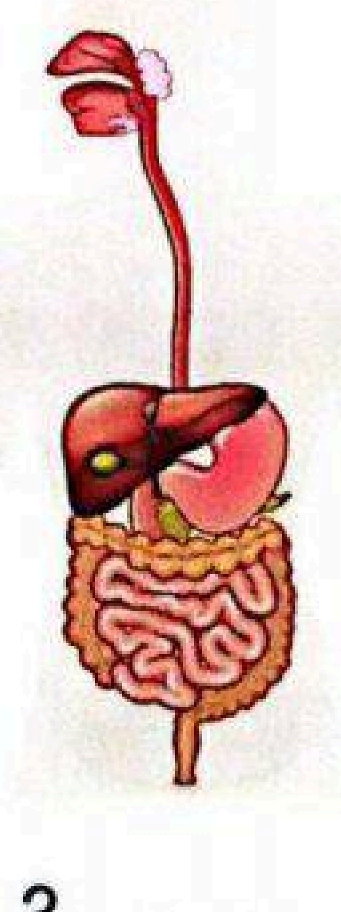
1. System number .... helps endocrine system in carrying hormones to the muscles and brain of the person.
2. Heart that belongs to system number .... begins to beat quickly.
3. System number .... contains diaphragm muscle which contracts and relaxes many times to increase the breathing rate.
4. Both system number (1) and (2) help .... gas to reach muscles and brain of the person.

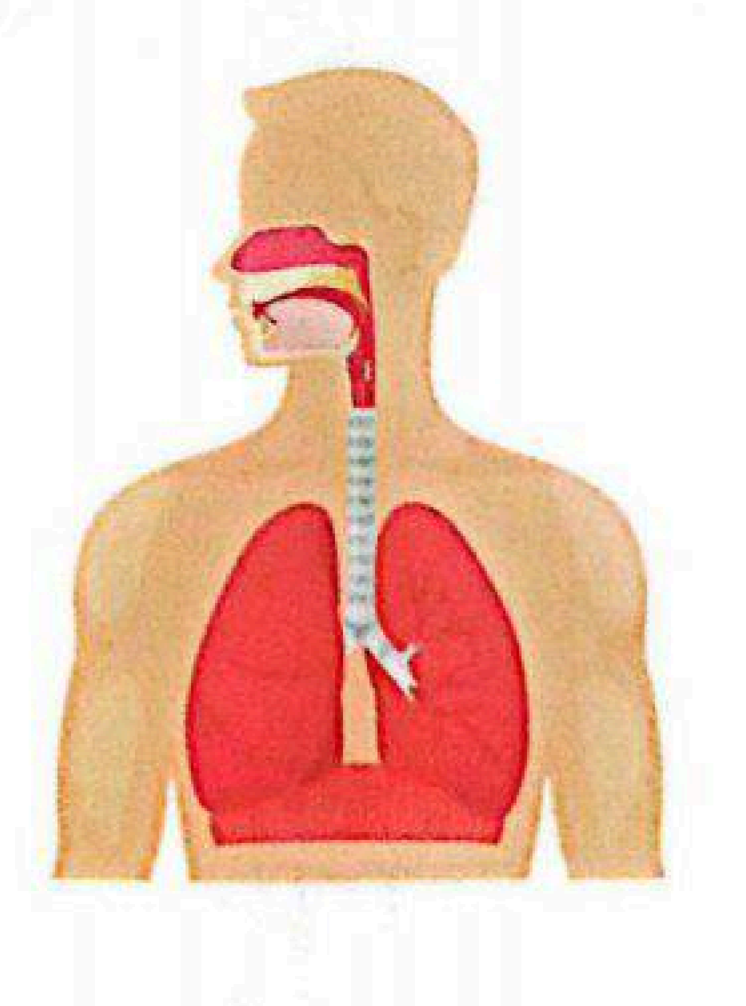
Write each of the following organs below the system that belongs to :

(Heart – Lungs – Kidneys – Stomach)

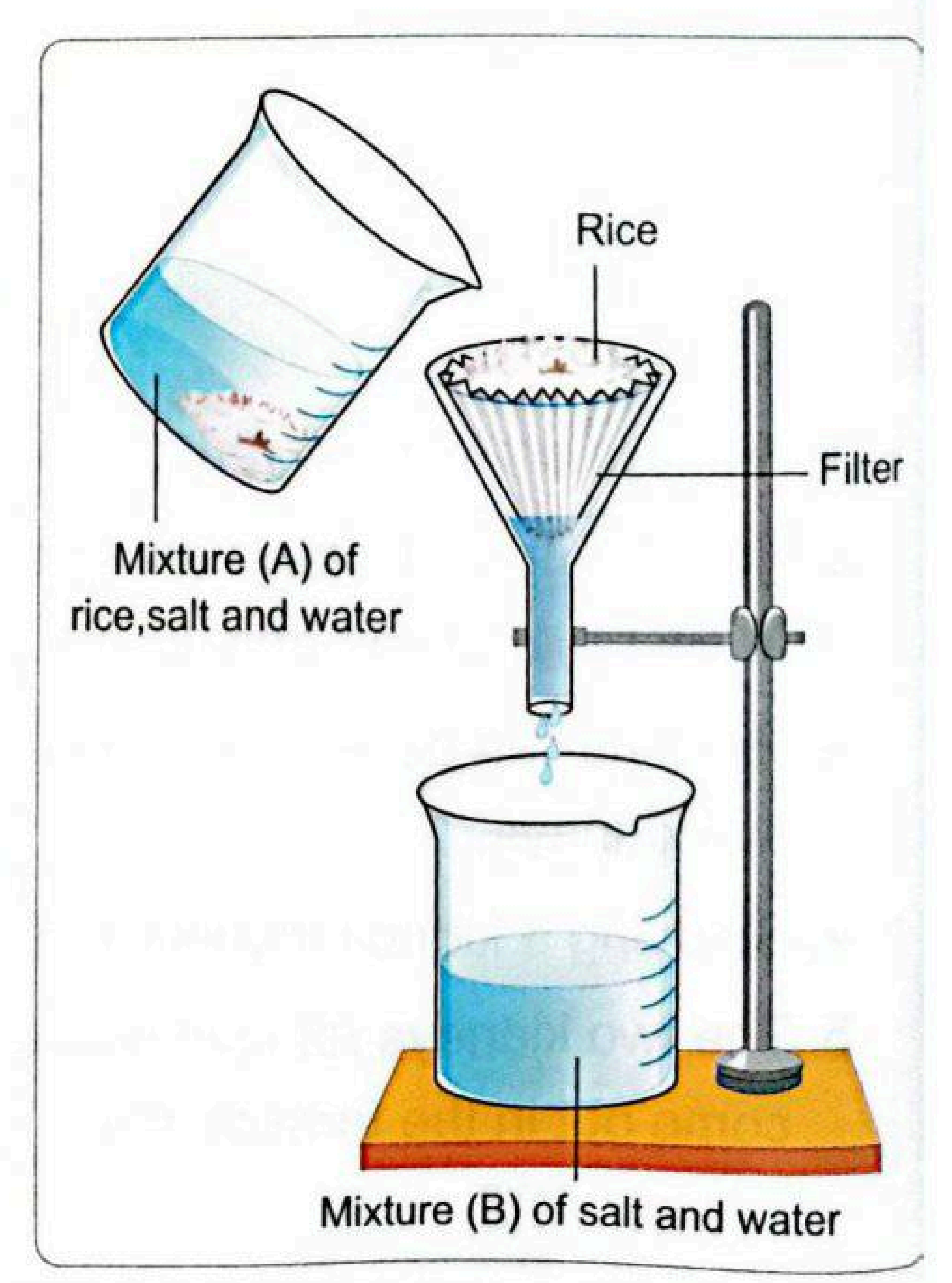

1. ....


2. ....


3. ....


4. ....

6 Look at the opposite figure, then choose the correct answer from those between brackets :



1. The filter in the opposite figure is like .... organ in the urinary system.

   (stomach – kidney)

2. Mixture (A) is like .... which is found in the body.

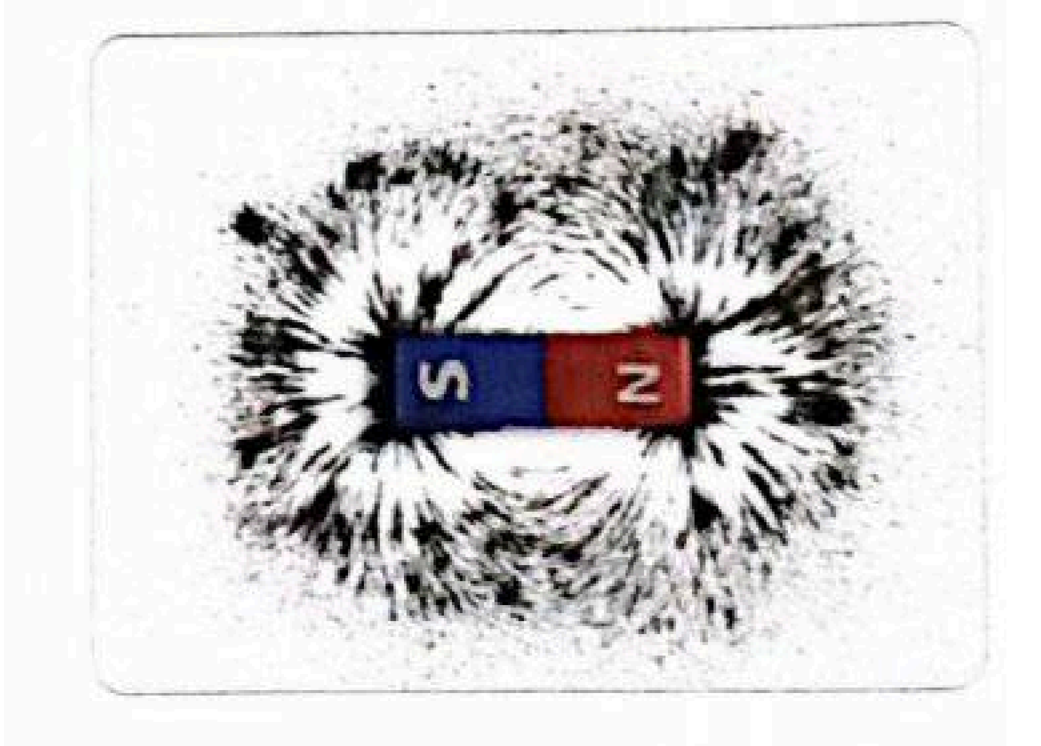
   (blood before filtering – blood after filtering)

3. Mixture (B) is like .... that comes out from the body. (filtered blood – urine)

4. Rice in the opposite figure is like .... which cannot pass through nephrons during filtration of blood. (proteins – urea)

8 Complete the following sentences using the words below :

(iron filings – magnet – magnetic field – iron)



1. This tool is called ....
   and it is made of ....

2. This tool is surrounded by an area called ....

3. We can observe the force of this tool by using .... which make pattern around it.

8 From the opposite figure, choose the correct answer :

1. Material number (s) .... will be attracted to the magnet.

a. (1) only b. (1) and (2) only

c. (2) only d. (3) and (4) only

2. Which of these material are considered as magnetic materials ? ....

a. (1) and (2) b. (3) and (4)

c. (1) , (2) and (3) d. (1) , (3) and (4)

3. Which of these materials are considered as non-magnetic materials ? ....

a. (1) and (2) b. (3) and (4)

c. (1) , (2) and (3) d. (1) , (3) and (4)

8 Look at the opposite figure then answer :

a. This device is called ....

b. It consists of .... and ....

c. The idea of its work is changing .... energy into .... energy.

d. This device is used in .... and ....

9 Look at the opposite figure, then answer the questions :

a. Label the figure :

1. .... 2. ....

3. .... 4. ....

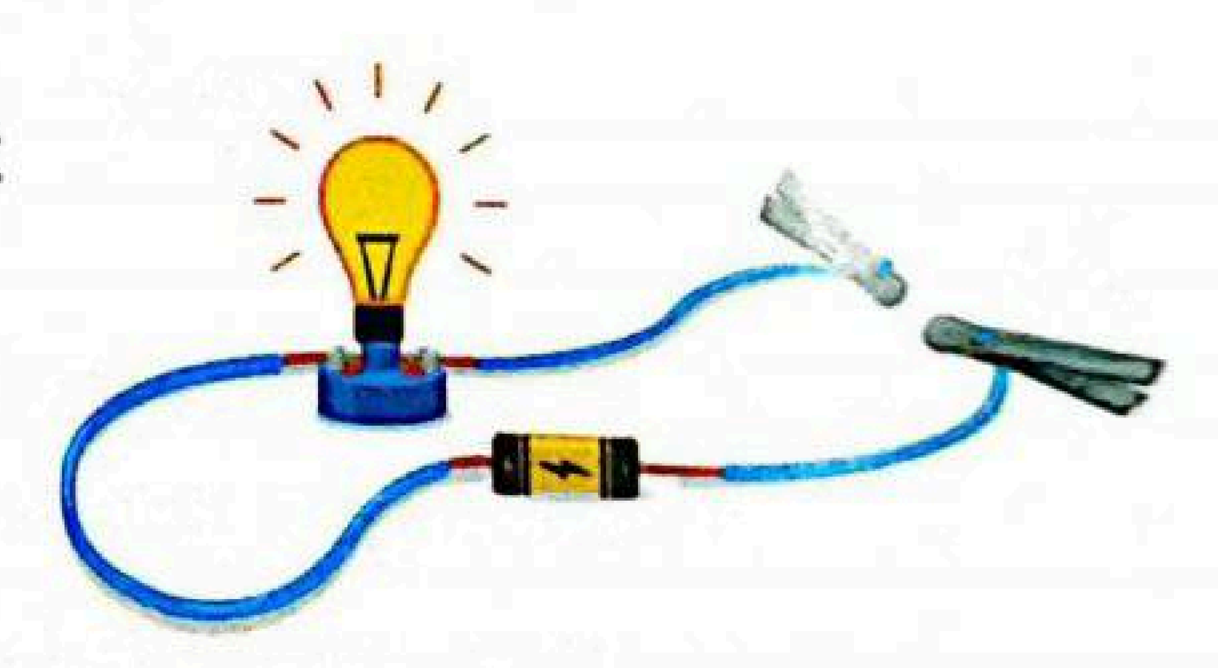
b. What is the function of device number ?

1. .... 2. ....

c. What happens if device number (1) is closed ?

....

6 Look at the opposite figure, then answer :



Classify the following materials into materials that will close the circuit and others will not close it ? giving reason ?

(Iron nail – plastic spoon – Rubber – Metallic spoon – Piece of wood – Metallic key)

1. The materials which will close the circuit :

....

The reason :

....

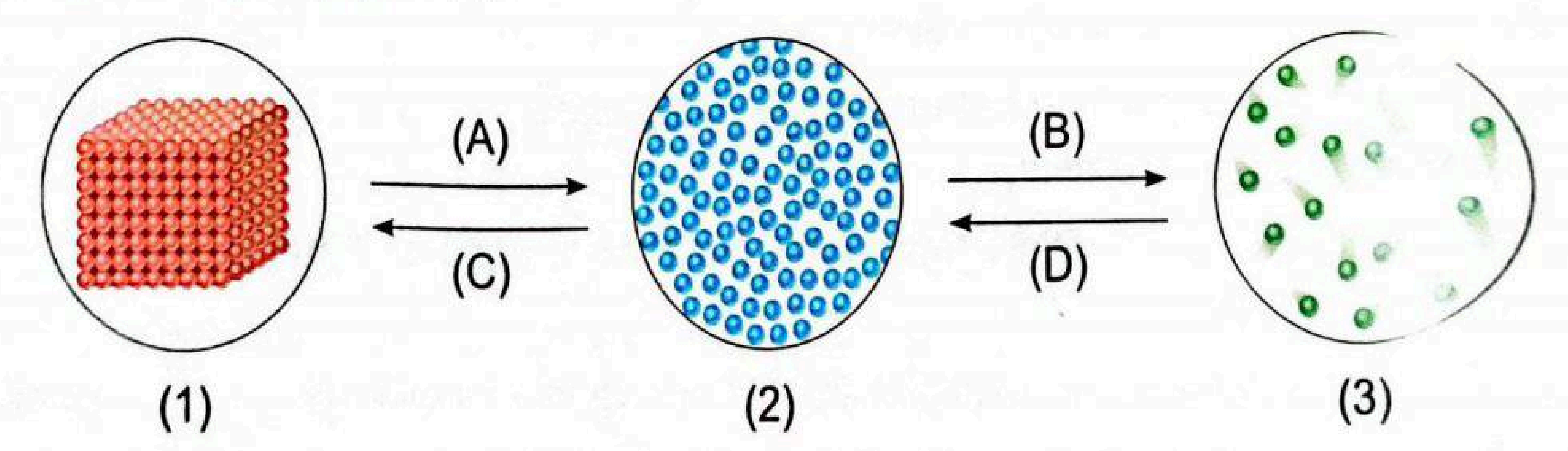
2. The materials which will not close the circuit :

....

The reason :

....

8 Study the following figures that represents molecules of the three stat of water then put (✓) or (✗) :



1. Process (B) is called evaporation, while process (C) is called freezing. (   )
2. Water can be changed from state (2) to state (3) by cooling, while it can be changed from state (2) to state (1) by heating. (   )
3. During process (A), the molecules absorb thermal energy and move faster. (   )
4. During process (D), the force that holds molecules together decreases so, they vibrate slower. (   )

7 Look at the following figures then answer :

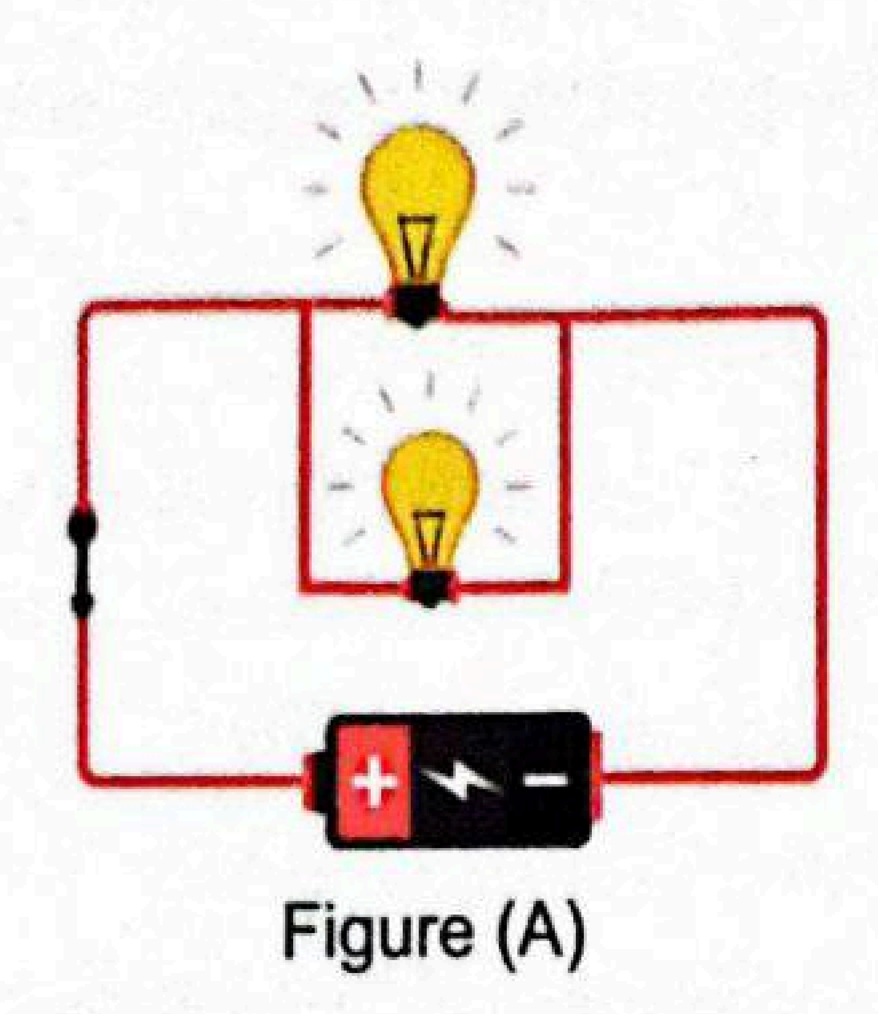


Figure (A)

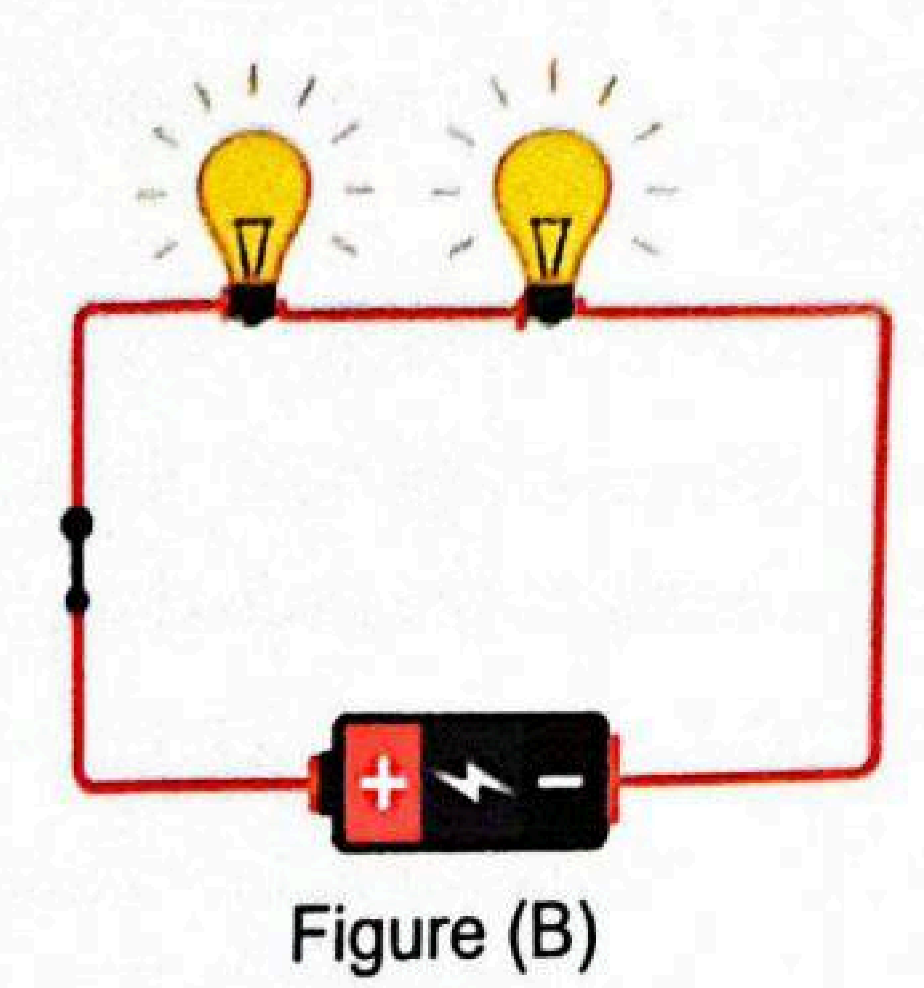


Figure (B)

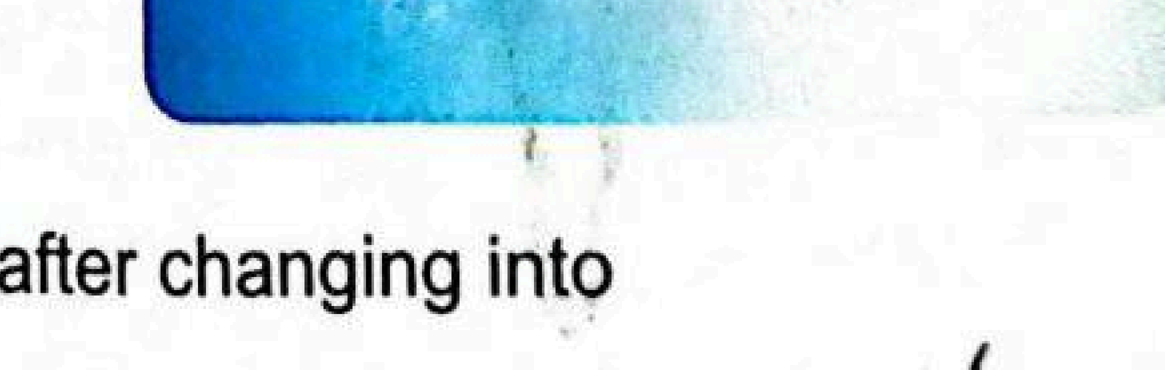
a) Choose :

1. Which of these figures is a series circuit ? (Figure A – Figure B)
2. Which of these figures is a parallel circuit ? (Figure A – Figure B)

b) Put (✓) or (✗) :

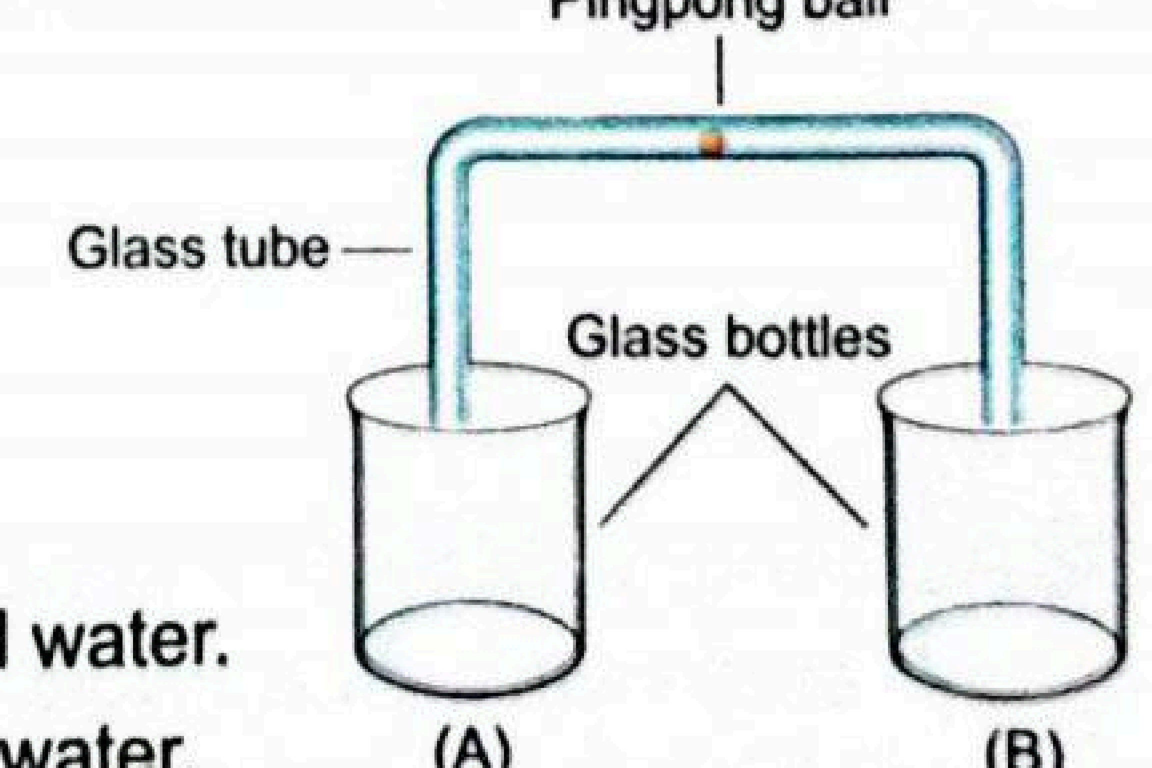
1. If we remove a lamp from the circuit in figure (A), the other lamp will still lit. ( )
2. If the switch in figure (B) is replaced by a metallic paper clip, all lamps will turn off. ( )

7 Look at the opposite picture that represents wet clothes that are put on a washing line to dry, then put (✓) or (✗) in front of the following sentences :



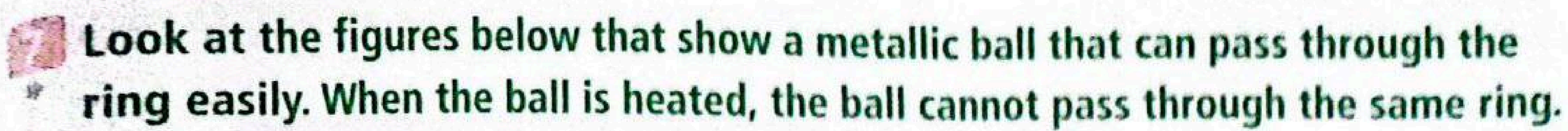
1. Water in the clothes turns into water vapor in the air as they dry. ( )
2. Molecules of water in the clothes move slower after changing into water vapor. ( )
3. The change of state of water from liquid state to gas state is known as evaporation. ( )
4. The kinetic energy of water molecules is greater than that of water vapor molecules. ( )

9 **Look at the figure below that shows 2 empty glass bottles connected by a glass tube with a pingpong ball in the tube :**

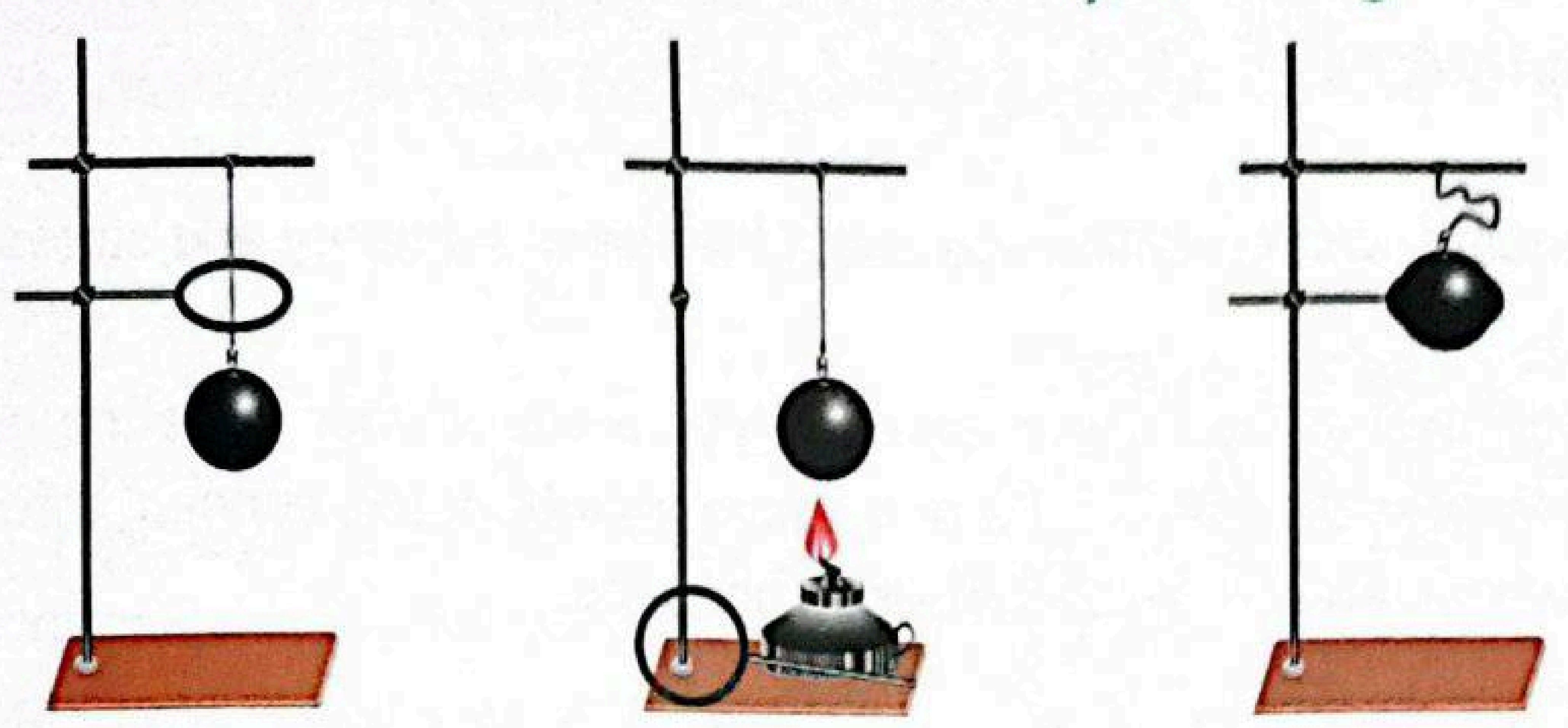


- Without breaking the glass tube, which way will cause the small ball to move nearer to bottle B ? ....

a. Put both bottles (A) and (B) into a basin of cold water.
b. Put both bottles (A) and (B) into a basin of hot water.
c. Put bottle (A) into a basin of hot water and bottle (B) into a basin of cold water.
d. Put bottle (A) into a basin of cold water and bottle (B) into a basin of hot water.



7 **Look at the figures below that show a metallic ball that can pass through the ring easily. When the ball is heated, the ball cannot pass through the same ring.**



Complete the following sentences using the words below :

(heat – cool – expansion – contraction – kinetic)

1. When we .... the ball, the .... energy of its molecules increases.
2. After heating the ball, the ball cannot pass as a result of its ....
3. If we .... the ball, it can pass through the ring again as a result of its ....

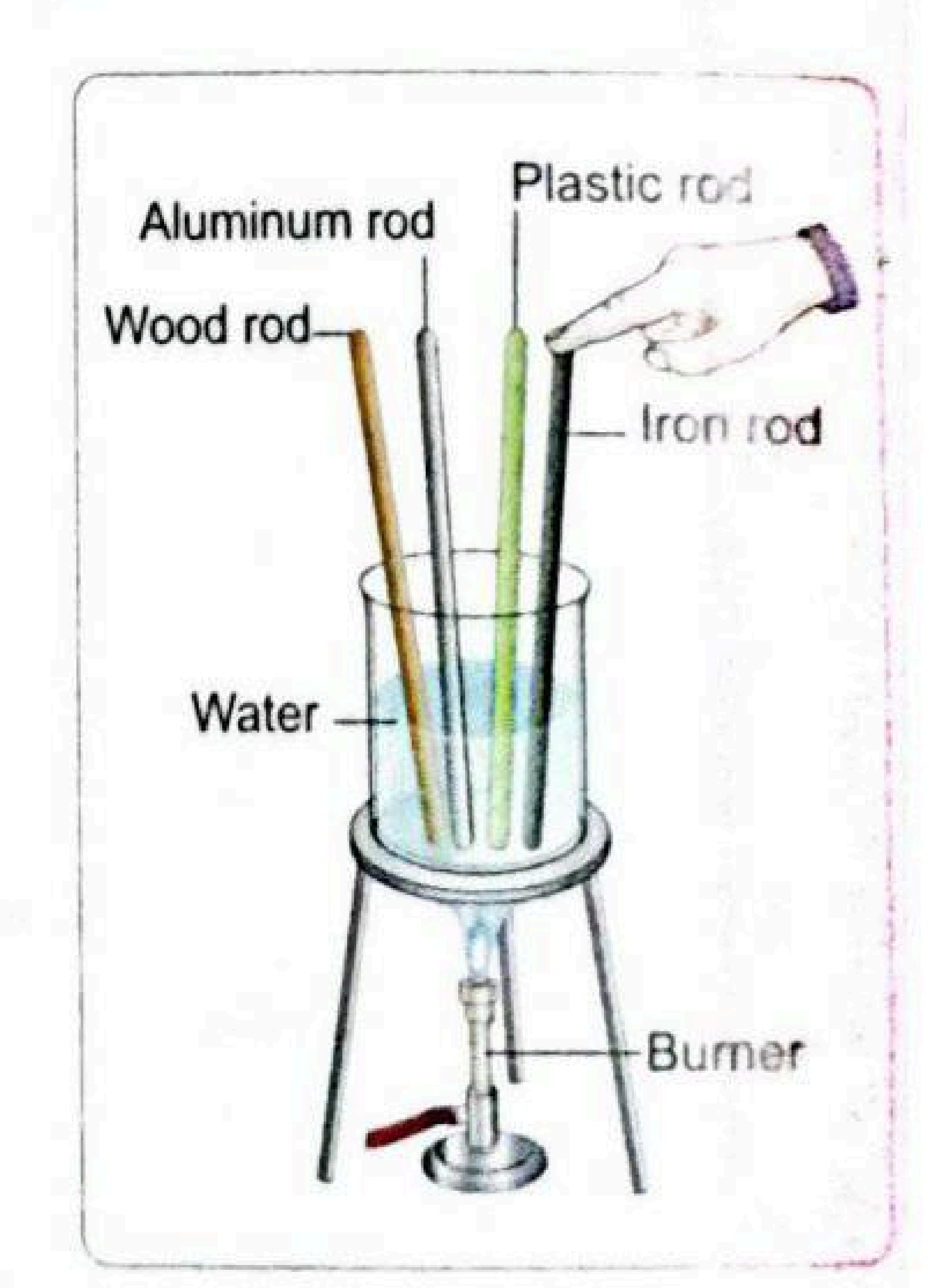
7 **Look at the picture below that shows 2 similar inflated balloons Ⓐ and Ⓑ, If one of them is placed in a low temperature place and the other is placed in a higher temperature place.**

- Put (✓) or (✗) :

1. Molecules of air move in balloon Ⓐ faster than in balloon Ⓑ. (   )
2. Spaces between molecules of air in balloon Ⓑ are greater than that of air in balloon Ⓐ. (   )
3. Air expands in balloon Ⓐ and contracts in balloon Ⓑ. (   )

Thermometer

9 **Look at the opposite figure then choose the correct answer :**



1. Heat transfers through water molecules by ....
   a. convection. b. conduction.
   c. freezing. d. radiation.
2. Heat transfers through aluminum rod by ....
   a. convection. b. conduction.
   c. boiling. d. radiation.
3. .... and .... rods slow down the heat transfer through them.
   a. Iron – wood b. Plastic – wood
   c. Iron – aluminum d. Plastic – aluminum
4. .... and .... rods are good conductors of heat.
   a. Iron – wood b. Plastic – wood
   c. Iron – aluminum d. Plastic – aluminum

7 Look at the following graphs which show the temperatures of two substances before and after mixing them together, then answer the questions below :

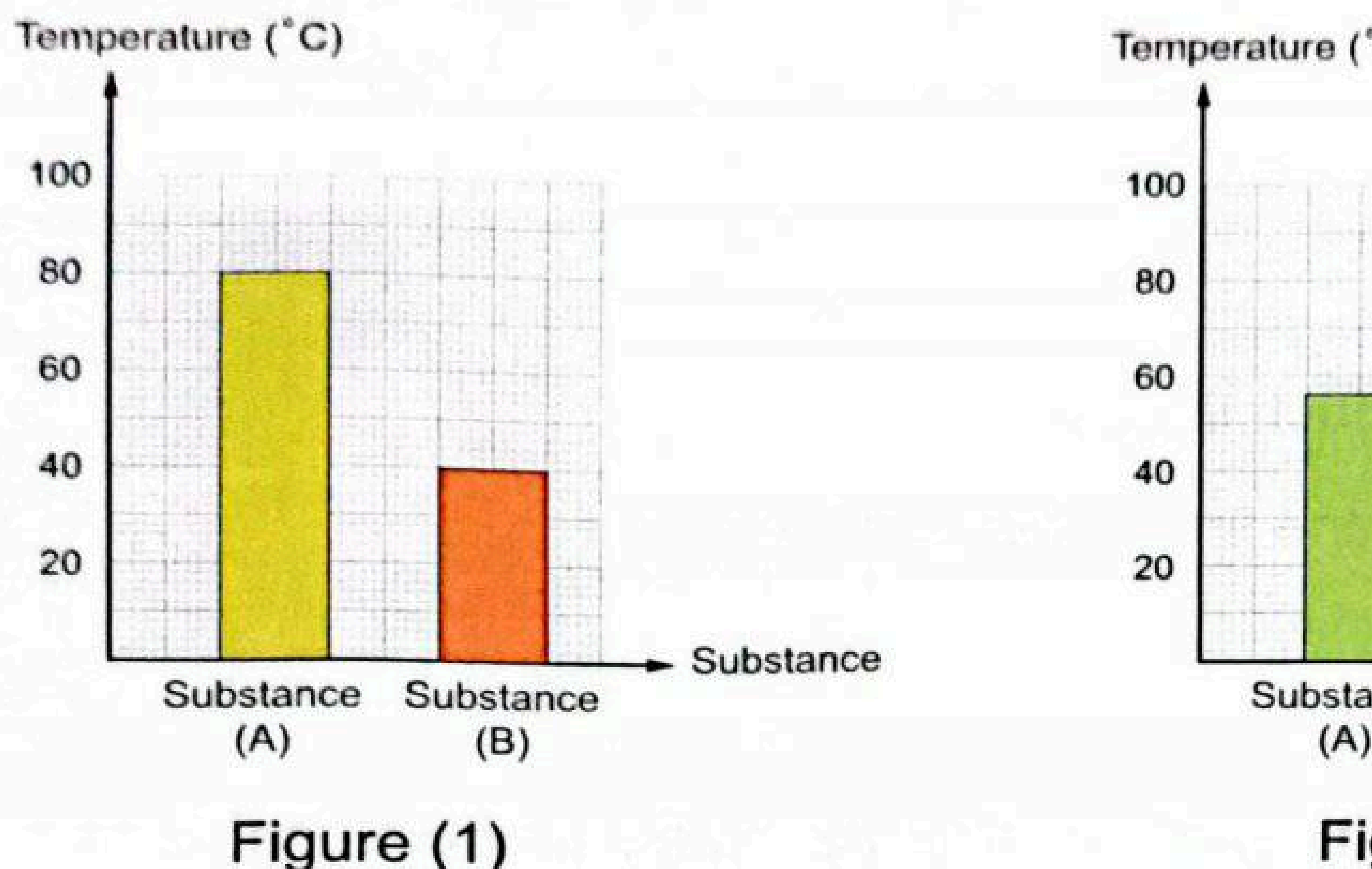


Figure (1) Figure (2)

(A) Complete :

1. Figure (..........) represents the mixture at thermal equilibrium.
2. In figure (1) molecules of substance (..........) move slower than that of substance (..........).
3. In figure (2) molecules of substance (..........) move slower after mixing, while molecules of substance (..........) move faster after mixing.

(B) Choose :

1. According to figure (1), the final temperature of substance (A) and substance (B) will be between ....°C and ....°C

   a. 20 – 40 b. 40 – 80 c. 80 – 100 d. 10 – 20

2. The temperature at thermal equilibrium of two substances may equal ....°C

   a. 40 b. 80 c. 56 d. 120

8 Look at the following figures, then complete the sentences below :

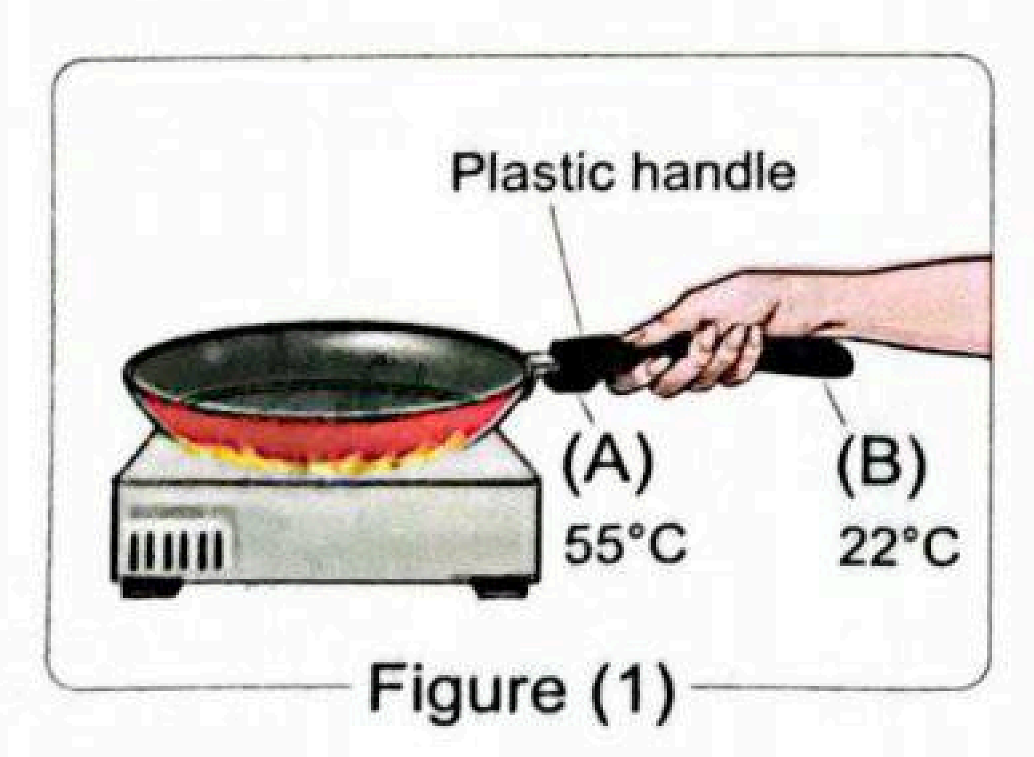


Figure (1)

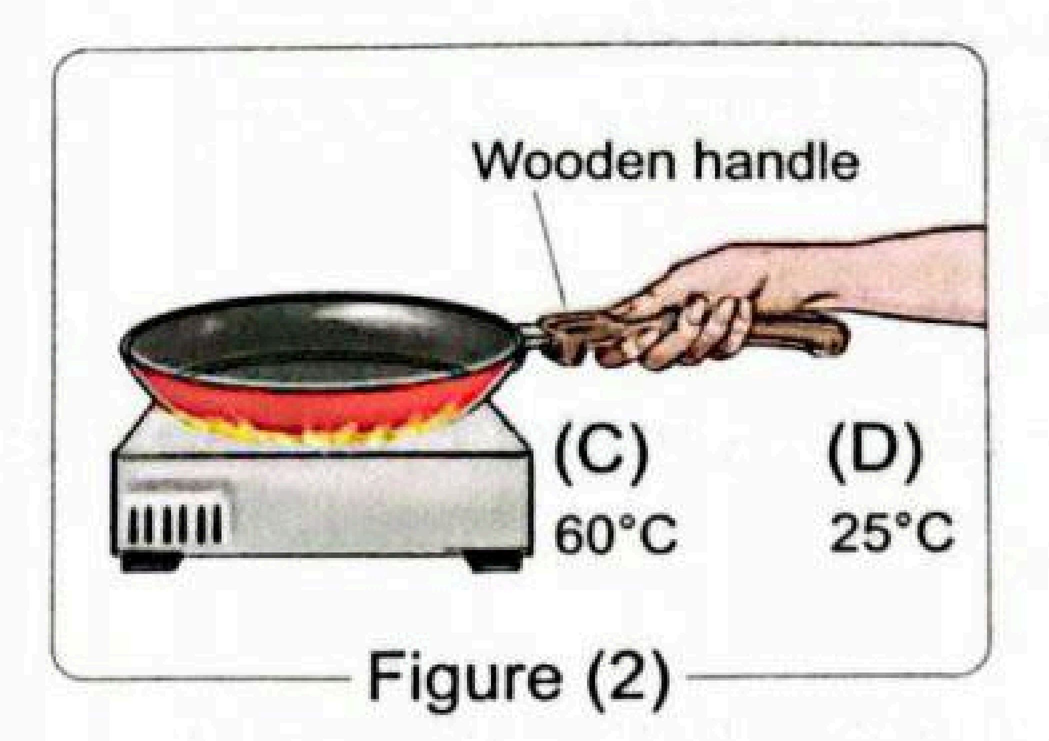


Figure (2)

1. The handle in figure (..............) warms up faster than the handle in figure (..............).
2. In the two figures, points (..............) and (..............) have the highest temperatures.
3. In the two figures, points (..............) and (..............) have the lowest temperatures.